State of California
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

320 West 4th Street, Suite 200, Los Angeles

FACT SHEET
WASTE DISCHARGE REQUIREMENTS
FOR
VENTURA WATER RECLAMATION FACILITY
(NPDES NO. CA0053651)

I. INTRODUCTION

The City of San Buenaventura (City or Discharger) discharges wastes from its Ventura Water Reclamation Facility under waste discharge requirements contained in Order No. 95-074 adopted by this Regional Board on June 12, 1995. This Order also serves as the National Pollutant Discharge Elimination System (NPDES) permit (CA0053651).

The City has filed a report of waste discharge and has applied for renewal of its waste discharge requirements and NPDES permit.

II. DESCRIPTION OF FACILITY AND DISCHARGE

The City operates the Ventura Water Reclamation Facility, a publicly owned tertiary wastewater treatment facility with a design capacity of 14 million gallons per day (mgd). The facility is located at 1400 Spinnaker Drive, San Buenaventura, Ventura County, California (Figure 1 shows the location of the plant). The facility treats municipal wastewater from domestic, commercial, and industrial sources. The treated wastewater is discharged into the Santa Clara River Estuary, a water of the United States, at latitude 34^{o} 14' 11", and longitude 119^{o} 15' 31" (Discharge Serial No. 001). The facility is responsible for 375 miles of sewer mains and 12 lift stations in addition to the treatment plant.

Currently, the City is renovating and upgrading the existing aeration system and secondary sedimentation tanks of the activated sludge process. The City anticipates that all major structural upgrades which impact the operation of the treatment process will be complete by October 1, 2000.

Upon completion of the upgrade, treatment at the facility will consist of grit removal, primary sedimentation, flow equalization, roughing filters, activated sludge, tertiary filters, chlorination / dechlorination, primary sludge thickener, DAF secondary sludge thickener, anaerobic digestion, plate press, and land application or landfill as the final destination for the sludge. During the completion of the upgrade, the treatment at the facility consists of grit removal, primary sedimentation, flow equalization, activated sludge, tertiary filters, chlorination / dechlorination, primary

sludge thickener, anaerobic digestion, plate press, and land application or landfill as the final destination for the sludge.

Sludge is thickened, anaerobically digested, and dewatered (using filter presses). A portion of the dewatered sludge is composted (Class B), and hauled to various users in Ventura County. The rest of the dewatered sludge is disposed of in Simi Valley or Chiquita Canyon landfill.

III. BASIS FOR THE PROPOSED WASTE DISCHARGE REQUIREMENTS

A. BENEFICIAL USES

1. Receiving Surface Waters are:

Santa Clara River Estuary – Hydro Unit No. 403.11:
Navigation, water contact recreation, noncontact water recreation, commercial and sport fishing, estuarine habitat, marine habitat, wildlife habitat, rare, threatened, or endangered species, migration of aquatic organisms, spawning, and wetland habitat.

Pacific Ocean, Nearshore*
Industrial service supply, navigation, water contact recreation, noncontact water recreation, commercial and sport fishing, marine habitat, wildlife habitat, preservation of biological habitats, rare, threatened, or endangered species, migration of aquatic organisms, spawning, and shellfish harvesting.

* Nearshore is defined as the zone bounded by the shoreline and a line 1,000 feet from the shoreline or the 30-foot depth contours, whichever is further from the shoreline.

B. WATER QUALITY IN SANTA CLARA WATERSHED

The Regional Board has implements the Watershed Management Initiative to address water quality issue in the region. The objective is to identify a comprehensive and integrated strategy to protect, enhance, and restore water quality and beneficial uses while balancing economic and environmental factors within a watershed.

The Santa Clara River is the largest river system in southern California that remains in a relatively natural state and is a high quality natural resource for much of its length. The river originates in the northern slope of the San Gabriel Mountains in Los Angeles County, traverses Ventura County, and flows into the Pacific Ocean halfway between the cities of San Buenaventura and Oxnard. Currently there are 4 major dischargers (all POTWs), 16 significant or minor dischargers under individual permits, as well as 19 dischargers currently covered under general permits discharging to the Santa Clara River. There are also 98 dischargers

covered under an industrial storm water permit and 190 dischargers covered under a construction storm water permit discharging to the Santa Clara River. The permits in this watershed are targeted for review and renewal in fiscal year 2001/2002.

Increasing loads of nitrogen and salts in ground water are threatening the beneficial uses including irrigation and drinking water supplies. Other threats to water quality include increasing development in floodplain areas which necessitates flood control measures such as channelization that result in increased runoff volumes and velocities, erosion, and loss of habitat. Another problem is the unsewered areas which pose a threat to drinking water wells because of the use of septic tanks.

On May 12, 1999, the USEPA approved the State Water Resources Control Board's (SWRCB) Water Quality Assessment (WQA). The SWRCB prepared their WQA, or 303(d) List, in accordance with section 303(d) of the federal Clean Water Act, which calls for the identification of specific water bodies that do not meet or are not expected to meet water quality standards, even after the implementation of technology-based effluent limitations on point source discharges.

The Santa Clara River Estuary and Beach is on the 1998 303(d) list for coliform while a portion of the river upstream of the estuary is listed for ammonia and coliform. Portions of the river have chloride exceedances. The estuary is also listed for DDT in fish tissue. Two small lakes in the upper watershed are also on the 1998 303(d) list for eutrophication, trash, dissolved oxygen, and pH problems. The Estuary is also listed for Chem A which is the sum of the chemicals aldrin, dieldrin, chlordane, endrin, heptachlor, heptachlor epoxide, HCH (including lindane), endosulfan, and toxaphene and also for toxaphene alone. TMDL development for the Santa Clara River Estuary is scheduled to begin in fiscal year 2001/2002.

The State of California Department of Parks and Recreation has declared this area part of the Santa Clara River Estuary Natural Preserve.

C. DISCHARGER HISTORY

1. On June 12, 1995, the Regional Board last issued waste discharge requirements for the Ventura Water Reclamation Facility. At that time, it was understood that there were some pollutant limits that the VWRF would not be able to meet. Interim limits were included in the permit until such time as the City completed its study to determine the source of the pollutants, implemented process changes that would minimize the presence of the problem pollutants, determined how to achieve these limits, and completed a characterization of the estuary. The City believed that the estuary is predominantly fresh water and that the effluent limits, if calculated using fresh receiving water data instead of salt water receiving criteria, would be achievable.

2. In May of 1996, the City submitted Phase 1 of the NPDES Limit Achievability Study which identified which new permit limits could not be currently complied with, and to determine if source control actions applied to controllable discharges could be expected to reduce discharge concentrations below effluent limits contained in the permit. The study indicated the City was in compliance with most limits, however, the following pollutants were problematic: bis(2-ethylhexyl)phthalate, dichlorobromomethane, copper, lead, nickel, and zinc.

   Zinc appeared to be the only problem pollutant that could be reduced in concentration by source control actions. Zinc orthophosphate was used as a corrosion control additive in the water supply and the substitution of another chemical compound proved sucessful. The application of source control methods would not decrease the concentrations found in the effluent for copper, lead, nickel, and bis(2-ethylhexyl)phthalate because current removal efficiencies were unable to meet the limits established in the permit. Dichlorobromomethane results from the addition of chlorine used in the disinfection process and cannot be reduced in concentration with the current treatment process.

3. On March 5, 1998, the City submitted Phase 2 of the NPDES Limit Achievability Study which addressed the achievability of permit limits through treatment process modifications. The City reviewed the USEPA Bibliographic Database and found no full scale information on processes that would achieve compliance with their NPDES permit limits. Processes examined include reverse osmosis, addition of lime, alternate disinfection processes, activated carbon adsorption and air stripping. Either the process would not aid in VWRF's achieving compliance or there were other adverse effects that needed to be further analyzed.

4. On November 12, 1999, the City submitted Phase 3 of the NPDES Limit Achievability Study which addressed the results of the receiving water study and determined the appropriate standards for calculating water quality objectives for the Santa Clara River Estuary. The City's interpretation of the results of this study are summarized below:

   a. Most of the designated beneficial uses are supported and enhanced by the City's discharge. The discharge provides make-up water from that lost upstream due to diversion and pumping;
   b. The estuary is primarily a freshwater ecosystem, which should allow for consideration of water hardness in recalculating the discharge limits for metals;

c. State regulations prohibit fishing and shellfish collection in the estuary and low numbers of suitably sized species are present, therefore the human consumption of seafood from the estuary is much lower than assumed in standard risk models. The study proposes that site specific information be used in calculating water quality objectives for the organic pollutants and concludes that adjusting the permit limits using site specific information will still be protective of the beneficial uses of the estuary;

d. Adjusting the permit limits by incorporating site-specific information will not impair or harm the beneficial uses of the estuary;

e. The criteria for determining the site specific objectives are met; and,

f. Monitoring studies of the Santa Clara River and Estuary show that ambient concentrations of the six pollutants are comparable to the concentrations found in the effluent. Effluent concentrations and ambient concentrations exceed the NPDES permit limits with similar frequency for all pollutants except copper.

D. STATUTES, RULES, POLICIES, AND REGULATIONS APPLICABLE TO THE DISCHARGE:

1. Effluent limitations, national standards of performance, toxic and pretreatment effluent standards, established pursuant to Section 208(b), 301, 302, 303(d), 304, 306, 307, and 405 of the Federal Clean Water Act (CWA) and amendments thereto.

2. CWA 402 and 40 CFR Parts 122, 123, and 124 regulations, (and therefore State Board Order Nos. 91-13-DWQ and 92-12-DWQ), for storm water discharges.

3. CWA Section 303(d)(4) and CWA Section 402(o)(2), USEPA Antibacksliding Policy.

4. 40 CFR Part 304 regulations for implementation of USEPA's water quality-based limitations for toxic pollutants.

5. Division 7 of the California Water Code is applicable to discharges to navigable water and tributaries thereto.

6. California Drinking Water Standards (California Domestic Water Quality and Monitoring Regulations, Title 22, California Code of Regulations).

7. State Water Resources Control Board Thermal Plan (revised September 18, 1975).

8. State Water Resources Control Board Resolution No. 68-16, (adopted on October 28, 1968), and USEPA 40 CFR 131.2, "Antidegradation Policies."

9. Water quality objectives for surface water are followed, according to the Water Quality Control Plan (Basin Plan) for the Coastal Watersheds of Los Angeles and Ventura Counties, adopted June 13, 1994.

10. California Toxics Rule (CTR) promulgated on May 18, 2000, by the United States Environmental Protection Agency (USEPA) and codified as CFR part 131.38.

11. State Board Resolution No. 2000-15, "Adoption of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed bays and Estuaries of California (State Implementation Policy or SIP)," adopted on March 2, 2000.

12. State Board Resolution No. 2000-030, "Amending Resolution 2000-15 Regarding Adoption of the Policy for Toxics Standards for Inland Surface Waters, Enclosed bays and Estuaries of California (SIP)," adopted on April 26, 2000.

E. REASONABLE POTENTIAL ANALYSIS

1. As specified in 40 CFR 122.44(d) (1) (i), permits are required to include limits for all pollutants which are discharged or may be discharged at a level which will cause, have reasonable potential to cause, or contribute to an excursion above any State water quality standard.

2. According to the SIP, there are three tiers to conducting a complete reasonable potential analysis (RPA).

   a. Tier 1 – Compare maximum effluent concentration (MEC) & Adjusted CTR Criteria (C). If MEC ≥ C, a limit is needed. If MEC < C, then go to Tier 2. If insufficient effluent water quality data are available, the RPA is not complete. The Discharger must gather the appropriate data so that the Regional Board can conduct a complete RPA, to determine whether final effluent limits are needed. If the Regional Board determines that final effluent limits are needed, upon review of the data, the permit will be reopened and limits will be added.

   b. Tier 2 – Compare Background water quality data to Adjusted CTR Criteria. If B > C, then a limit is needed.
   If ambient background (B) water quality data are not available, the RPA is not complete. The Discharger must gather the appropriate data so that the Regional Board can

conduct a complete RPA, to determine whether final effluent limits are needed. If the Regional Board determines that final effluent limits are needed, upon review of the data, the permit will be reopened and limits will be added.

c. Tier 3 – use other information to determine RPA. (SIP Section 1.3, page 5, step 7)

3. Data from the 2000 report of waste discharge (ROWD) and effluent data from the July 1995 to May 2000 self-monitoring reports was used to do the RPAs. Many constituents were consistently not detected in the effluent.

   a. If the RPA was YES, then a limit was included in the permit (refer to fact sheet section E.2). If the previous Order 95-074 already contained a limit, the most stringent limit was included in the permit (refer to fact sheet section E.1).

   b. If the RPA was NO, no new limit was added to the permit.

   c. If the RPA was incomplete due to lack of effluent, background or ambient water quality data, interim monitoring requirements have been included in the monitoring and reporting program. Once the data are available, the Regional Board will perform a RPA to determine if effluent limits are necessary. If they are, the permit will be reopened and these limits will be added.

4. The following had an incomplete RPA, therefore a limit is not established at this time and interim monitoring is being required:

CTR#	Constituent
1	Antimony
3	Beryllium
17	Acrolein
18	Acrylonitrile
22	Chlorobenzene
24	Chloroethane
25	2-Chloroethyl vinyl ether
28	1,1-Dichloroethane
29	1,2-Dichloroethane
30	1,1-Dichoroethylene
31	1,2-Dichloropropane
32	1,3-Dichloropropylene
34	Methyl bromide
35	Methyl chloride
37	1,1,2,2-Tetrachloroethane
40	Trans 1,2-Trichloroethane
42	1,1,2-Trichloroethane

CTR #	Constituent
43	Trichloroethylene
44	Vinyl chloride
45	2-Chlorophenol
46	2,4-Dichlorophenol
47	2,4-Dimethylphenol
48	4,6-Dinitro-o-cresol
49	2,4-Dinitrophenol
50	2-Nitrophenol
51	4-Nitrophenol
52	3-Methyl-4-chlorophenol
56	Acenaphthene
57	Acenaphthylene
58	Anthracene
65	Bis(2-chloroethoxy)methane
67	Bis(2-chloroisopropyl)ether
75	1,2-Dichlorobenzene
76	1,3-Dichlorobenzene
80	Dimethyl phthalate
82	2,4-Dinitrotoluene
83	2,6-Dinitrotoluene
84	Di-n-octyl phthalate
86	Fluoranthene
87	Fluorene
89	Hexachlorobutadiene
90	Hexachlorocyclopentadiene
93	Isophorone
94	Naphthalene
95	Nitrobenzene
96	N-Nitrosodimethylamine
98	N-Nitrosodiphenylamine
99	Phenanthrene
100	Pyrene
101	1,2,4-Trichlorobenzene
114	Endosulfan sulfate
116	Endrin aldehyde

5. The following had an incomplete RPA due to lack of information to answer Tier 2. However, Tier 3 suggests a limit should be set. Tier 3 was positive because of other available information. In this case either the constituent is present in the influent or the waterbody is on the 303 (d) list for this constituent. However, CTR does not provide numerical limits for these constituents. Therefore, interim monitoring of these constituents is required. They will also be covered under the narrative limitation which states no toxic

pollutants shall be present in toxic concentrations. These constituents are:

CTR#	Constituent
45	1,1,1-Trichloroethane
69	4-Bromophenyl phenyl ether
106	Delta-BHC

F. SPECIFIC RATIONALES FOR EACH OF THE NUMERICAL EFFLUENT LIMITATIONS

1. The following pollutants are in the tentative permit and the numerical limitations are taken from:

1/ Previous Order (Order No. 96-047) kept due to Antibacksliding and sufficient data does not exist;
2/ The Basin Plan;
3/ The Thermal Plan;
4/ National Toxics Rule;
5/ National Recommended Water Quality Criteria – Corrected (EPA 822-Z-99-001 April 1999);
6/ MCL;
7/ Title 22, Division 4, Chapter 3, Article 1, Section 60301(r);
8/ CTR & State Implementation Policy (SIP); or
9/ Similar permits.

CTR #	Constituent	Units	Discharge Limitations		
			Monthly Average	7 day Average	Daily Maximum
	BOD	mg/L	20** 1/, 9/	30** 1/, 9/	45** 1/, 9/
	Suspended solids	mg/L	15** 1/, 9/	40** 1/, 9/	45** 1/, 9/
	Oil and grease	mg/L	10** 1/, 9/	----	15** 1/, 9/
	Settleable solids	ml/L	0.1** 1/, 9/	----	0.3** 1/, 9/
	Residual chlorine	mg/L	----	----	0.1** 1/, 9/

See footnotes on page 11.

CTR #	Constituent	Units	Discharge Limitations	
			Monthly Average	Daily Maximum
2	Arsenic	µg/L	29.4* 8/	59* 8/
4	Cadmium	µg/L	9.3** 1/	43** 1/
5b	Chromium VI	µg/L	3.7* 8/	11+, * 8/
6	Copper@	µg/L	2.0+, * 8/	2.9** 8/
7	Lead	µg/L	7.0* 8/	14+, * 8/
8	Mercury	µg/L	0.025** 8/	0.12* 8/
9	Nickel	µg/L	5.3* 8/	15.2+, * 8/
10	Selenium	µg/L	2.9* 8/	8.8+, * 8/
11	Silver	µg/L	----	2.3** 1/
12	Thallium	µg/L	6.3** 8/	19+, * 8/
13	Zinc	µg/L	38* 8/	95** 8/
14	Cyanide	µg/L	0.41+, * 8/	0.99* 8/

CTR #	Constituent	Units	Discharge Limitations	
			Monthly Average	Daily Maximum
19	Benzene	µg/L	----	71** [1/]
21	Carbontetrachloride	µg/L	----	4.4** [1/]
27	Dichlorobromomethane	µg/L	----	22** [1/]
38	Tetrachloroethylene	µg/L	----	8.9** [1/]
53	Pentachlorophenol	µg/L	7.9** [1/]	13** [1/]
55	2,4,6-Trichlorophenol	µg/L	----	6.5** [8/]
68	Bis(2-ethylhexyl)phthalate	µg/L	----	5.9** [8/]
102	Aldrin	µg/L	0.00014* [8/]	0.00028* [8/]
105	Gamma BHC (Lindane)	µg/L	0.063* [8/]	0.013* [8/]
119-125	PCBs[#]	ng/L	0.00017* [8/]	0.00034[+], * [8/]

See footnotes on page 11.

2. The following effluent pollutant limits are being added:

CTR #	Constituent	Units	Discharge Limitations	
			Monthly Average	Daily Maximum
16	2,3,7,8-TCDD	µg/L	1.4 x 10-8[+ 8/]	2.8 x 10-8[+ 8/]
26	Chloroform	µg/L	----	470[+ 8/]
23	Dibromochloromethane	µg/L	34[+ 8/]	82[+ 8/]
54	Phenol	µg/L	46,000,000[+ 8/]	9,246,000[+ 8/]
59	Benzidine	µg/L	0.00054[+ 8/]	0.0011[+ 8/]
60	Benzo(a)anthracene	µg/L	0.049[+ 8/]	0.098[+ 8/]
61	Benzo(a)pyrene	µg/L	0.049[+ 8/]	0.098[+ 8/]
62	Benzo(b)fluoranthene	µg/L	0.049[+ 8/]	0.098[+ 8/]
64	Benzo(k)flouranthene	µg/L	0.049[+ 8/]	0.098[+ 8/]
66	Bis(2-chloroethyl)ether	µg/L	1.4[+ 8/]	2.8[+ 8/]
73	Chrysene	µg/L	0.049[+ 8/]	0.098[+ 8/]
78	3,3'Dichlorobenzidine	µg/L	0.077[+ 8/]	0.15[+ 8/]
85	1,2-Diphenylhydrazine	µg/L	0.54[+ 8/]	1.09[+ 8/]
88	Hexachlorobenzene	µg/L	0.00077[+ 8/]	0.0015[+ 8/]
91	Hexachloroethane	µg/L	8.9[+ 8/]	28140[+ 8/]
92	Indeno(1,2,3-cd)pyrene	µg/L	0.049[+ 8/]	0.0015[+ 8/]
103	Alpha-BHC	µg/L	0.013[+ 8/]	0.026[+ 8/]
104	Beta-BHC	µg/L	0.046[+ 8/]	0.92[+ 8/]
107	Chlordane	µg/L	0.00059[+ 8/]	0.0012[+ 8/]
108	4,4'-DDT	µg/L	0.00059[+ 8/]	0.0012[+ 8/]
109	4,4'-DDE	µg/L	0.00059[+ 8/]	0.0012[+ 8/]
110	4,4'-DDD	µg/L	0.00084[+ 8/]	0.0017[+ 8/]
111	Dieldrin	µg/L	0.00014[+ 8/]	0.00028[+ 8/]
112	Alpha endosulfan	µg/L	0.023[+ 8/]	0.014[+ 8/]
113	Beta endosulfan	µg/L	0.0036[+ 8/]	0.014[+ 8/]
115	Endrin	µg/L	0.00094[+ 8/]	0.0038[+ 8/]
117	Heptachlor	µg/L	0.00021[+ 8/]	0.00042[+ 8/]
118	Heptachlor epoxide	µg/L	0.00011[+ 8/]	0.00022[+ 8/]
126	Toxaphene	µg/L	0.00016[+ 8/]	0.00033[+ 8/]
20	Bromoform	µg/L	360[+ 8/]	778[+ 8/]

CTR #	Constituent	Units	Discharge Limitations	
			Monthly Average	Daily Maximum
33	Ethylbenzene	µg/L	29000+ 8/	58290+ 8/
36	Methylene chloride	µg/L	1600+ 8/	3216+ 8/
39	Toluene	µg/L	200,000+ 8/	402,000+ 8/
77	1,4-Dichlorbenzene	µg/L	2600+ 8/	5226+ 8/
79	Diethyl phthalate	µg/L	120,000+ 8/	241,200+ 8/
81	Di-n-butyl phthalate	µg/L	12000+ 8/	24120+ 8/

See footnotes on page 11.

The following footnotes apply to sections E1. through E3.:

H The criteria for this metal is hardness dependent. A hardness of 400 mg/L was used in the calculations, because it is the maximum hardness allowed in CTR & SIP.

\+ This limit was added.

* These limits were changed.

** This constituent had an effluent limitation in the previous Order.

\# PCBs are a class of chemicals which include aroclors 1242, 1254, 1221, 1232, 1248, 1260, and 1016. The permit limit applies to the sum of this set of seven aroclors.

@ An interim limit is being established by a Time Schedule Order for this pollutant. The Discharger will have 2 years to complete a study approved by the Executive Officer to provide data in order to develop a site-specific objective. The interim limit shall be set to comply with the freshwater criteria defined in CTR. This interim limit is:

Constituent	Units	Monthly Average	Daily Maximum
Copper	µg/l	18	52

The mass-based limitations in (lbs/day) were calculated using the following equation: Mass-based limit = 8.34 x 14 MGD x Concentration-based limit in mg/L, where 8.34 is a conversion factor. These limits were included in the tentative Order and are not expressed again within this document.

Dilution is not factored into the calculation of effluent limitations. The equation

$$ECA = C + Q_a/Q_e(C-B)$$

where ECA = Effluent Concentration Allowance, C = Criteria, Q_a = Ambient Flow, Q_e = Effluent Flow, and B = Ambient Background Concentration cannot be calculated because there is not sufficient data available for B or Q_a.

G. SPECIFIC RATIONALES FOR EACH OF THE NUMERICAL RECEIVING WATER LIMITATIONS

1. Receiving water requirements are based on 40 CFR Part 122.44 (Establishing limitations, standards, and other permit conditions) and California Water Code (CWC) Section 13263 (Prescribing requirements, conditions, considerations, effect of); CWC Section

13267 (Investigation, monitoring, and inspections); CWC Section 13377 (Permits to comply with Federal Acts); and CWC Section 13383 (Monitoring, inspection, entry, reporting, and record keeping requirements).

2. The numerical limitation for temperature is based on the Basin Plan and the Thermal Plan.

3. The numerical limitations for pH are based on the Basin Plan.

IV. MONITORING

A. INFLUENT MONITORING

The following pollutants are in the tentative Influent Monitoring Program (Order No. 00-XXX):

CTR #	Constituents	Units	Type of Sample	Minimum Frequency of Analysis
	Flow	mgd	recorder/totalizer	continuous
	Suspended solids	mg/L	24-hour composite	weekly
	$BOD_5$20°C	mg/L	24-hour composite	weekly
5b	Chromium VI	µg/L	24-hour composite	semiannually
	Pesticides	µg/L	24-hour composite	semiannually
	USEPA priority pollutants (Attachment 1)	µg/L	24-hour composite	semiannually

B. EFFLUENT MONITORING

The following pollutants are in the proposed tentative Effluent Monitoring Program (Order No. 00-XXX):

CTR#	Constituent	Units	Type of Sample	Minimum Frequency of Analysis
N/A	Total waste flow	mgd	recorder	continuous
N/A	Turbidity	NTU	recorder	continuous
N/A	Total residual chlorine	mg/L	recorder	continuous
N/A	Total and fecal coliform	MPN/100 ml	grab	daily
N/A	Settleable solids	ml/L	grab	daily
N/A	$BOD_5$20°C	mg/L	24-hour composite	daily
N/A	Suspended solids	mg/L	24-hour composite	daily
N/A	Temperature	°F	grab	weekly
N/A	pH	pH units	grab	weekly
N/A	Oil and grease	mg/L	grab	weekly
N/A	Total dissolved solids	mg/L	24-hour composite	monthly
N/A	Fluoride	mg/L	24-hour composite	monthly
N/A	Phosphate	mg/L	24-hour composite	monthly
N/A	Ammonia nitrogen	mg/L	24-hour composite	monthly
N/A	Nitrate nitrogen	mg/L	24-hour composite	monthly
N/A	Nitrite nitrogen	mg/L	24-hour composite	monthly
N/A	Organic nitrogen	mg/L	24-hour composite	monthly

CTR#	Constituent	Units	Type of Sample	Minimum Frequency of Analysis
N/A	Total Kjeldahl nitrogen	mg/L	24-hour composite	monthly
N/A	Detergents (as MBAS)	mg/L	24-hour composite	monthly
N/A	Chronic toxicity	TU_c	24-hour composite	monthly
14	Cyanide	µg/L	grab	quarterly
N/A	Aluminum	µg/L	24-hour composite	quarterly
1	Antimony	µg/L	24-hour composite	quarterly
2	Arsenic	µg/L	24-hour composite	quarterly
N/A	Barium	µg/L	24-hour composite	quarterly
3	Beryllium	µg/L	24-hour composite	quarterly
4	Cadmium	µg/L	24-hour composite	quarterly
5b	Chromium VI	µg/L	24-hour composite	quarterly
N/A	Cobalt	µg/L	24-hour composite	quarterly
6	Copper	µg/L	24-hour composite	quarterly
N/A	Iron	µg/L	24-hour composite	quarterly
7	Lead	µg/L	24-hour composite	quarterly
8	Mercury	µg/L	24-hour composite	quarterly
N/A	Molybdenum	µg/L	24-hour composite	quarterly
9	Nickel	µg/L	24-hour composite	quarterly
10	Selenium	µg/L	24-hour composite	quarterly
11	Silver	µg/L	24-hour composite	quarterly
12	Thallium	µg/L	24-hour composite	quarterly
N/A	Vanadium	µg/L	24-hour composite	quarterly
13	Zinc	µg/L	24-hour composite	quarterly
19	Benzene	µg/L	grab	quarterly
20	Bromoform	µg/L	grab	quarterly
27	Bromodichloromethane	µg/L	grab	quarterly
21	Carbon tetrachloride	µg/L	grab	quarterly
26	Chloroform	µg/L	grab	quarterly
23	Dibromochloromethane	µg/L	grab	quarterly
N/A	Dichloromethane	µg/L	grab	quarterly
38	Tetrachloroethylene	µg/L	grab	quarterly
N/A	Phenols			
	-chlorinated	µg/L	24-hour composite	quarterly
	-non-chlorinated	µg/L	grab	quarterly
68	Bis(2-ethylhexyl)phthalate	µg/L	grab	quarterly
119-125	PCBs	ng/L	24-hour composite	quarterly
102	Aldrin	µg/L	24-hour composite	quarterly
105	Gamma-BHC (Lindane)	µg/L	24-hour composite	quarterly
111	Dieldrin	µg/L	grab	quarterly
107	Chlordane	µg/L	grab	quarterly
115	Endrin	µg/L	grab	quarterly
117	Heptachlor	µg/L	grab	quarterly
118	Heptachlor epoxide	µg/L	grab	quarterly
103	Alpha-BHC	µg/L	grab	quarterly
104	Beta-BHC	µg/L	grab	quarterly
106	Delta-BHC	µg/L	grab	quarterly
112	Alpha endosulfan	µg/L	grab	quarterly
113	Beta endosulfan	µg/L	grab	quarterly
126	Toxaphene	µg/L	grab	quarterly

CTR#	Constituent	Units	Type of Sample	Minimum Frequency of Analysis
108	DDT	µg/L	grab	quarterly
N/A	Acetone	µg/L	24-hour composite	quarterly
N/A	Total xylene	µg/L	24-hour composite	quarterly
N/A	Pesticides	µg/L	24-hour composite	semiannually
N/A	Remaining USEPA priority pollutants (excluding asbestos, Attachment 1)	µg/L	24-hour composite	semiannually
N/A	Radioactivity	pCi/L	24-hour composite	semiannually
N/A	Acute toxicity	TU_a	24-hour composite	annually

C. INTERIM EFFLUENT MONITORING

The following pollutants are in the proposed tentative Effluent Monitoring Program (Order No. 00-XXX):

1. In accordance with the SIP, the Discharger is required to conduct effluent monitoring for the following seventeen 2,3,7,8-TCDD congeners:

Isomer Group	Toxicity Equivalence Factor (TEF)	Frequency of Monitoring
2,3,7,8-TetraCDD	1	Once per dry season and once per wet season
1,2,3,7,8-PentaCDD	1.0	Once per dry season and once per wet season
1,2,3,4,7,8-HexaCDD	0.1	Once per dry season and once per wet season
1,2,3,6,7,8-HexaCDD	0.1	Once per dry season and once per wet season
1,2,3,7,8,9-HexaCDD	0.1	Once per dry season and once per wet season
1,2,3,4,7,8,9-HeptaCDD	0.01	Once per dry season and once per wet season
OctaCDD	0.0001	Once per dry season and once per wet season
2,3,7,8-TetraCDF	0.1	Once per dry season and once per wet season
1,2,3,7,8-PentaCDF	0.05	Once per dry season and once per wet season
2,3,4,7,8-PentaCDF	0.5	Once per dry season and once per wet season
1,2,3,4,7,8-HexaCDF	0.1	Once per dry season and once per wet season
1,2,3,6,7,8-HexaCDF	0.1	Once per dry season and once per wet season
1,2,3,7,8,9-HexaCDF	0.1	Once per dry season and once per wet season
2,3,4,6,7,8-HexaCDF	0.1	Once per dry season and once per wet season
1,2,3,4,6,7,8-HeptaCDF	0.01	Once per dry season and once per wet season
1,2,3,4,7,8,9-HeptaCDF	0.01	Once per dry season and once per wet season
OctaCDF	0.0001	Once per dry season and once per wet season

Major dischargers, such as the VWRF, are required to sample the effluent once during the dry season and once during the wet season for three years (2001,2002,2003). The discharger must use the appropriate Toxicity Equivalence Factor (TEF) to determine the Toxic Equivalence (TEQ). Where TEQ equals the product between each of the 17 individual congeners' (i) concentration analytical result (C_i) and their corresponding Toxicity Equivalence Factor (TEF_i)., (i.e., $TEQ_i = C_i \times TEF_i$). Compliance

with the Dioxin limitation shall be determined by the summation of the seventeen individual TEQs, or the following equation :

$$\text{Dioxin concentration in effluent} = \sum_{1}^{17} (TEQ_i) = \sum_{1}^{17} (C_i)(TEF_i)$$

2. The following shall be conducted every quarter until the first quarter of 2003:

Constituent	Units	Type of Sample	Minimum Frequency of Analysis
All U.S. Priority Pollutants	µg/L	grab/composite	Quarterly

D. INTERIM RECEIVING WATER MONITORING PROGRAM

The previous Order No. 95-074 did not contain any receiving water monitoring other than residual chlorine, total coliform, and visual observations downstream from the discharge.

In accordance with the SIP, the discharger will be required to monitor the following constituents, for three years, so that a complete RPA can be performed:

Constituent	Units	Type of Sample	Minimum Frequency of Analysis
All U.S. Priority Pollutants	µg/L	grab/composite	Quarterly

E. INTERIM AMBIENT BACKGROUND WATER MONITORING PROGRAM

The previous Order No. 95-074 did not contain any ambient water monitoring upstream from the discharge point.

In accordance with the SIP, the Discharger will be required to monitor the following constituents, for three years, so that a complete RPA can be performed:

Constituent	Units	Type of Sample	Minimum Frequency of Analysis
All U.S. Priority Pollutants	µg/L	grab/composite	Quarterly

V. REQUEST FOR WRITTEN COMMENTS

Interested persons are invited to submit written comments upon these tentative Waste Discharge Requirements. Comments should be submitted either in person, or by mail to:

Tracy Patterson
California Regional Water Quality Control Board
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Written comments regarding the tentative Order must be received at the Regional Board office by the close of business on September 18, 2000, in order to be evaluated by Board staff and included in the Board's agenda folder. Comments received after that date will be provided, ex agenda, to the Board for consideration, but may result in a delay in hearing the tentative Order.

VI. COMMENTS RECEIVED

Regional Board staff met with the Discharger on July 31, 2000. Three main concerns were addressed.

A. The Discharger feels the limit of 2.9 µg/L set for copper is not achievable. The source of the copper is thought to be potable water which serves the Ventura community. Copper piping exists throughout the community.

B. The possibility of an ocean discharge was briefly discussed. There are associated problems with this approach which include an estimate of $100 million to build the structure, as well as problems securing the proper permits necessary to implement this option.

C. The Discharger also mentioned that the increased monitoring for all the priority pollutants in the ambient background waters as well as the receiving waters will significantly increase the cost of monitoring. For example, they indicated each complete priority pollutant scan costs $6000.

Regional Board staff held a meeting to discuss potential concerns and comments from agencies and environmental groups in regard to the renewal of the NPDES permit for this facility. Representatives for the Discharger and California Department of Parks and Recreation (CDPR), as well as Regional Board staff, were in attendance. Three main concerns were addressed.

A. CDPR would like to revisit the finding in the facilities plan for effluent utilization that was issued by the City in 1978 which states

that the discharge to the estuary enhances some of the beneficial uses.

B. CDPR would like the permit to acknowledge that the estuary is a natural preserve.

C. CDPR and the Discharger would like the consultation for the bioassessment in the MRP to include U.S. Fish and Wildlife in addition to California Department of Fish and Game.

D. There is a need for the Regional Board, CDPR, the Discharger, and other agencies to form a sub-watershed group which focuses on the area of the estuary. Additional studies are needed which will provide important information to the watershed as a whole.

A letter of written comments was submitted to the Board by CDPR on September 18, 2000.

VII. PUBLIC HEARING

The proposed waste discharge requirements will be considered by the Regional Board at a public hearing to be held on October 12, 2000, at the Camarillo City Hall, 601 Carmen Drive, Camarillo, California at 9:00 A.M.

VIII. WASTE DISCHARGE REQUIREMENTS APPEALS

Any person may petition the State Water Resources Control Board to review the decision of the Regional Board regarding the final waste discharge requirements (WDRs). Such a petition must be made within 30 days of the Regional Board public hearing and adoption of the WDRs.

IX. ADDITIONAL INFORMATION

The application, related documents, tentative effluent limitations and special conditions, comments received, and other information are on file and may be inspected at 320 West 4th Street, Suite 200, Los Angeles, California 90013, at any time between 8:30 AM and 4:45 PM, Monday through Friday by calling (213) 576-6600.

X. REGISTER OF INTERESTED PERSONS

Any person interested in this particular application or NPDES permit may provide their name, address, and phone number to the Board as a part of the Board's record.

XI. ATTACHMENTS

A. Attachment 1 – USEPA Priority Pollutants.

B. Figure 1 – Map showing the location of the Ventura Water Reclamation Facility.

C. RPA Analysis Document.